

OVERVIEW

During my studies the modules most relevant to Big Data were in mathematics; from introduction to calculus to advanced statistical mechanics and physics projects. The mathematics was applied to solve complex problems and to cement a quantitative and qualitative understanding of the field.

I completed a project at the London Centre for Nanotechnology investigating organic molecules on semiconductor surfaces. This involved a high amount of self-study and problem solving in the labs. I learnt to code in a new program called IGOR and wrote codes to analyse my data. This ability has proven to be vital when working with Big Data.

WORK

BIG DATA ENGINEER – KUBRICK GROUP, LONDON

At Kubrick Group I gained experience and qualified in: Professional and Communication Skills, IOC (Investment Operations Certificate) Level 1, Advanced Excel, Web Application development (UI/UX, JavaScript, CSS and HTML), Agile and SQL.

I then specialised in the Big Data Engineering course leading to accreditation as a Cloudera CCA Developer.

August 2016 - present

I worked on Big Data projects which exercised my skills in data ingestion and processing using Hadoop EcoSystem tools such as Sqoop, Flume and OpenSource Python Libraries including Pandas and Twython. We cleansed and munged data after exploratory data analysis through Python libraries including Plotly and Pandas then moving onto Spark to process, transform, analyse and stage the data into HDFS.

Projects included:

MetOffice Weather Data: involving Python API and Twitter processing into HDFS followed by further processing in the Hadoop Ecosystem.

Police Crime Data Analysis involving SSIS processing, SQL Analysis, and presentation through custom web front end.

CO-FOUNDER / FINANCE OFFICER – ETERNAL MEMORIES

October 2012 – June 2016

Co-founded the company which provides a photography, editing and website building consultancy service. My primary tasks included building relationships with investors and clients and handling the company's finances using excel. I also conducted research into different technologies to improve delivery of our products and services. I was involved in designing the apps and website.

EDUCATION

UNIVERSITY COLLEGE LONDON, BSC (HONS) PHYSICS 2:1

The course involved three course mathematics modules ranging from introduction to calculus to advanced statistical mechanics. These topics were used in physics modules to solve complex problems and to cement a quantitative and qualitative understanding of the field. This ability has proven to be vital when working with Big Data.

KEY SKILLS

Python Libraries (Anaconda):

PyMongo, Pandas, Numpy, scikit learn, Plotly and Twython

Cloudera Hadoop version 5.4:

HDFS, Yarn, Sqoop, Flume, Avro, Parquet, Impala, Hive and Hue

NoSQL:

MongoDB. API with PyMongo

SQL:

SSIS, Advanced T-SQL and Stored Procedures

Apache Spark:

RDD, DataFrames, SparkSQL, PySpark with some exposure to and understanding of Scala

Source Control and IDE:

Git, SourceTree and Git Extensions, PyCharm

Other Skills:

Linux CentOS 6, SSH, Putty, Agile, JSON and BSON, Python Pickle and Shelve

AKSHEYEN SELVARAJAH

Big Data Engineer

ABOUT ME

I enjoy working on intellectually stimulating problems in exciting and emerging fields. To follow my interests, the ideal subject to study was Physics and I thoroughly enjoyed the exposure to abstract theories and appreciated the amount of rigour behind them. Coming from a particle physics background, I first really related to the need and value of Big Data when considering the vast output from the Large Hadron Collider. As I continued my degree, Big Data gained popularity in the business world and at the time of graduation I was in a good position to enter the industry.

I am particularly interested in the role Big Data plays in the financial sector and believe that my exceptional analytical skills and experience with problem solving have put me in an excellent position to work and pioneer in the field.

CONTACT US

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